

November 20, 2010

RE: Letter to the ARSG in response to Todd Hennis' recent Open Letter

Dear Stakeholders,

Due to the important subject matter which included misleading information, inaccuracies, and accusations stated in Todd Hennis' recent letter to ARSG participants I think a response is necessary. Mr. Hennis has asked the County Commissioners to pass a resolution that they oppose creation of any Superfund sites in San Juan County. The subject has been placed on the Commissioner's agenda for 8:00 pm, Nov. 23 in the County Court house. We discussed this letter at our monthly meeting last Thursday and several ARSG participants plan to attend the Commissioners meeting to provide input, correct misleading information, and rebut accusations.

Who is Todd Hennis

For those unfamiliar with Mr. Hennis he has been an occasional attendee at our monthly meetings. He or his corporations (Salem Minerals Inc., San Juan Corp.) have acquired several mining claims in recent years, including the Mogul, Grand Mogul, and Gold King mines which have long been identified as significant contributors of metal pollution to the Animas Watershed. Unlike most landowners in the basin who inherited or unknowingly purchased patented mining claims, Mr. Hennis is what EPA refers to as a "non-innocent purchaser" since it can be argued that given his mining background and promotional intentions he would have considered the inherent responsibilities and environmental liabilities associated with mine properties of this nature.

ARSG position

While Mr. Hennis has a vested interest establishing blame for pollution from his properties the ARSG has consistently refrained from making accusations but instead strives to provide science-based information useful in understanding the problem and identifying potential solutions. We endeavor to monitor conditions, determine feasibility for remediation, and remediate 'abandoned' mine sites to accomplish our goal of improving water quality through consensus building and voluntary project development. We consciously choose to spend our limited public, private, and volunteer funded efforts on the ground rather than in litigation. ARSG has no regulatory or enforcement authority; however participant agencies such as CDPHE and EPA do have such obligations. We restricted our efforts to abandoned mines, avoiding the American Tunnel and Gold King mine since their permits were considered to be regulated and enforced by appropriate agencies and their legal authorities.

During the mid 90's the EPA went through a process that might have resulted in listing the Upper Animas Watershed on the National Priorities List (Superfund).

Representatives of ARSG went to Denver several times in an attempt to halt that action. Eventually Bill Yellowtail, then Regional Director of the EPA, came to Silverton and made our community a promise: EPA would not further pursue Superfund designation

"as long as ARSG was making progress" improving water quality in the Animas River. Although significant progress has been made in some areas including Mineral Creek, the ARSG has recently monitored and reported upon a significant degradation in water quality in Cement Creek, and to a lesser degree, the Animas below Silverton. EPA has not broken their promise because water quality in Cement Creek and in the Animas below Silverton has gotten worse.

Cement Creek Degradation

Water degradation in Cement Creek has slowly developed. Determination of precise reasons for this is complicated by natural variations in seasonal and yearly precipitation, underground hydrology and retention time, and the movement of water through fractures and faults. Complicating matters further are the significant anthropogenic actions brought about by the SGC consent decree including bulkhead installations, water treatment of the American Tunnel (AT) and a later period of treating various amounts of Cement Creek in addition to the AT, the creation of an extensive mine pool behind the AT #1 bulkhead, installation of AT bulkhead #2 and #3 and the restoration of the hydrologic cone drawn down by years of drainage from the AT, and the eventual cessation of all treatment and decommissioning of the water treatment plant at Gladstone.

A noticeable trend of degradation in water quality in Cement Creek has occurred since the terms of the Sunnyside Gold Corp. (SGC) consent decree were met (2003) and the termination of water treatment at Gladstone (2004). Discharges from the Mogul and Gold King mines had previously increased (1999 - 2001) following the closure of AT bulkhead #1 (1997) and creation of the mine pool. In 2001 AT bulkhead #2 was installed presumably to stop inflows from the Gold King portion of the tunnel. In 2002 bulkhead #3 was installed presumably to capture near surface inflows to the tunnel.

I strongly disagree with Mr. Hennis' accusations regarding increased discharges from his mines, that the Coordinator somehow did not adequately address or "allowed it to flow unchecked." During the summer of 2004 I noticed increased flows discharging from the Red and Bonita mine. I immediately took samples and estimated the amount of flow. Others reported significant flow increases discharging from the #7 level of the Gold King mine. ARSG considered these increased flows and metal loads to be a significant problem and by the fall of 2004 ARSG began investigating methods and funds necessary to accurately quantify the increases. Anticipating the potential severity of the problem we began discussions of potential solutions including the potential for reinstituting a appropriate water treatment facility. We even traveled to Denver to meet with CDPHE hoping to extend the old AT water treatment permit to enable that the less costly and more practical discharge standards of the old permit be applied to whatever might be instituted. Mr. Hennis is correct in assuming that neither I, nor the ARSG, blamed SGC, CDPHE, or myself for the increased flows. Instead we choose the path to collect sufficient information that would enable a creditable analysis of the problem(s).

ARSG did not create this new problem but we did respond immediately to determine the extent and find potential solutions. In 2004-5 at our request, San Juan County agreed to assist with this new effort by sponsoring a EPA Targeted Brownfield grant to take new water samples, record discharge amounts, and determine water treatment possibilities based upon current state of the art technologies. This EPA funded project cost approximately \$150K, not \$650K as Mr. Hennis states. Data was collected in 2005 and 2006 and the data and analyses were completed in 2007. Simultaneously, but concluding in May, 2006, the BLM funded the San Juan County Attorney (cost less than \$14K) to investigate potential funding sources, authorities, and legal entities that could operate a

water treatment plant. Meanwhile the ARSG has maintained water quality evaluations involving Cement Creek and the Gladstone area, and/or treatment possibilities as an agenda item at every meeting, except one, since 2004. Since I have been largely responsible for polling the participants and scheduling agenda items I am dismayed that Mr. Hennis would accuse me of "preventing any meaningful discussion". I act as a Coordinator not a Director. After evaluating the current state of the art facility and realizing the enormous cost and major obstacles, it was I that suggested we investigate the potential for developing a new technologies pilot testing facility that could both serve the nation for the development of cost effective treatment of acid mine drainage and eventually lead to the selection of an appropriate technology for the facility that would accomplish our goals. Meanwhile the ARSG has continued to explore all options including various treatment options, additional bulkheads, and removal of one or more of the AT bulkheads. We also maintain an active advocacy for the passage of Good Samaritan legislation which would likely be necessary for any treatment facility involving private ownership (www.goodsamaritaninfo.org).

It should be noted that Mr. Hennis' suggestion (that the only solution is) to remove the AT #3 bulkhead is worthwhile of consideration. However a viable solution appears to be more complex. At least one opinion is that the 2004 to present increase in discharges at Mr. Hennis' properties are likely coming from the appreciable amount of water coming from the old Gold King portion of the AT downstream from #1 bulkhead and between #2 and #3. And yet back in the late 90's Mr. Hennis complained that increased flows from the Mogul mine were coming from the Sunnyside mine pool (created by bulkhead #1). Using Mr. Hennis' logic one might logically conclude that all AT bulkheads need to be removed. If only bulkhead #3 were removed, we would likely still have significant discharges from Mr. Hennis' properties that would need to be treated. I say these things only to demonstrate that a treatment solution is not simple. Thank goodness the ARSG is not involved with the very messy business of establishing blame and litigating potentially responsible parties!

As for the conflict of interest accusation: In reviewing my records it appears that my firm, Alpine Environmental Services did some contract wetland consulting for SGC in the total amount of less than \$2000. I don't think I am overly swayed by this somewhat less than "hundreds of thousands of dollars of contracting" stated in Mr. Hennis' letter. (However I have been known to acknowledge the good faith efforts of SGC to spend tens of millions of dollars attempting to complete their remediation obligations.). Previous to my work with the ARSG I did contract work for Echo Bay, Inc., the previous owner of the Sunnyside properties, as well over 50 other mining companies. I think my experience working for numerous mining companies plus my ecological and environmental orientation were important considerations when the ARSG chose me as their Coordinator.

Conclusion

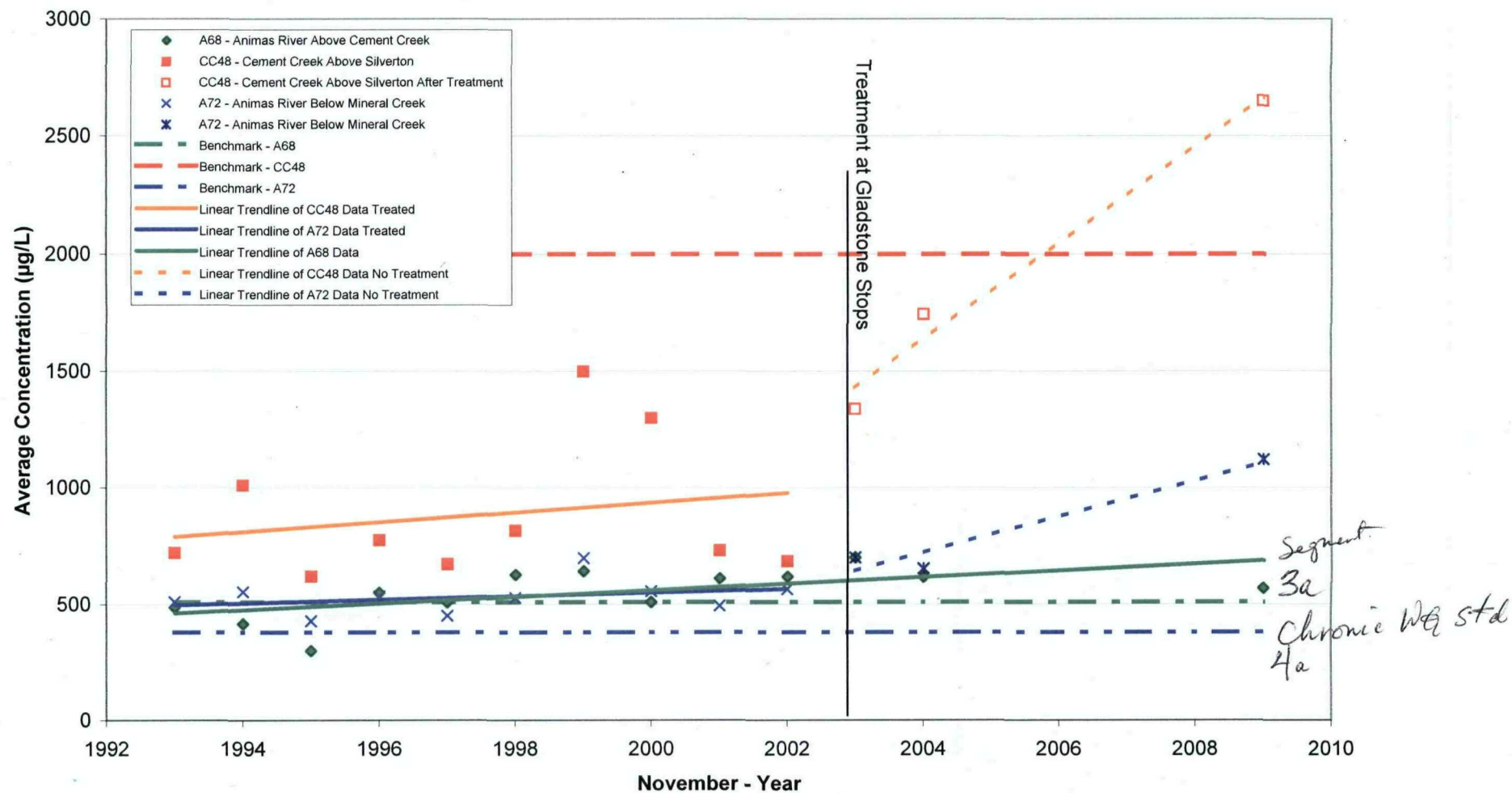
The issues associated with the mine discharges emanating from the AT, Gold King, Red and Bonita, Mogul, and Grand Mogul are incredibly complex. It takes time, funding, and careful evaluation to come to appropriate solutions. Various solutions need to be investigated and no possible solution denied without due consideration. For these reasons I would encourage participants, including the County Commissioners, to continue and support the collaborative approach to the examination of all possible solutions. In the meantime ARSG will continue to provide assistance, information, and a forum whereby all positions can be aired.

It has been a pleasure serving as your coordinator for the past 16 years and I look forward to everyone's continued involvement, at the level of your choosing. Be well.

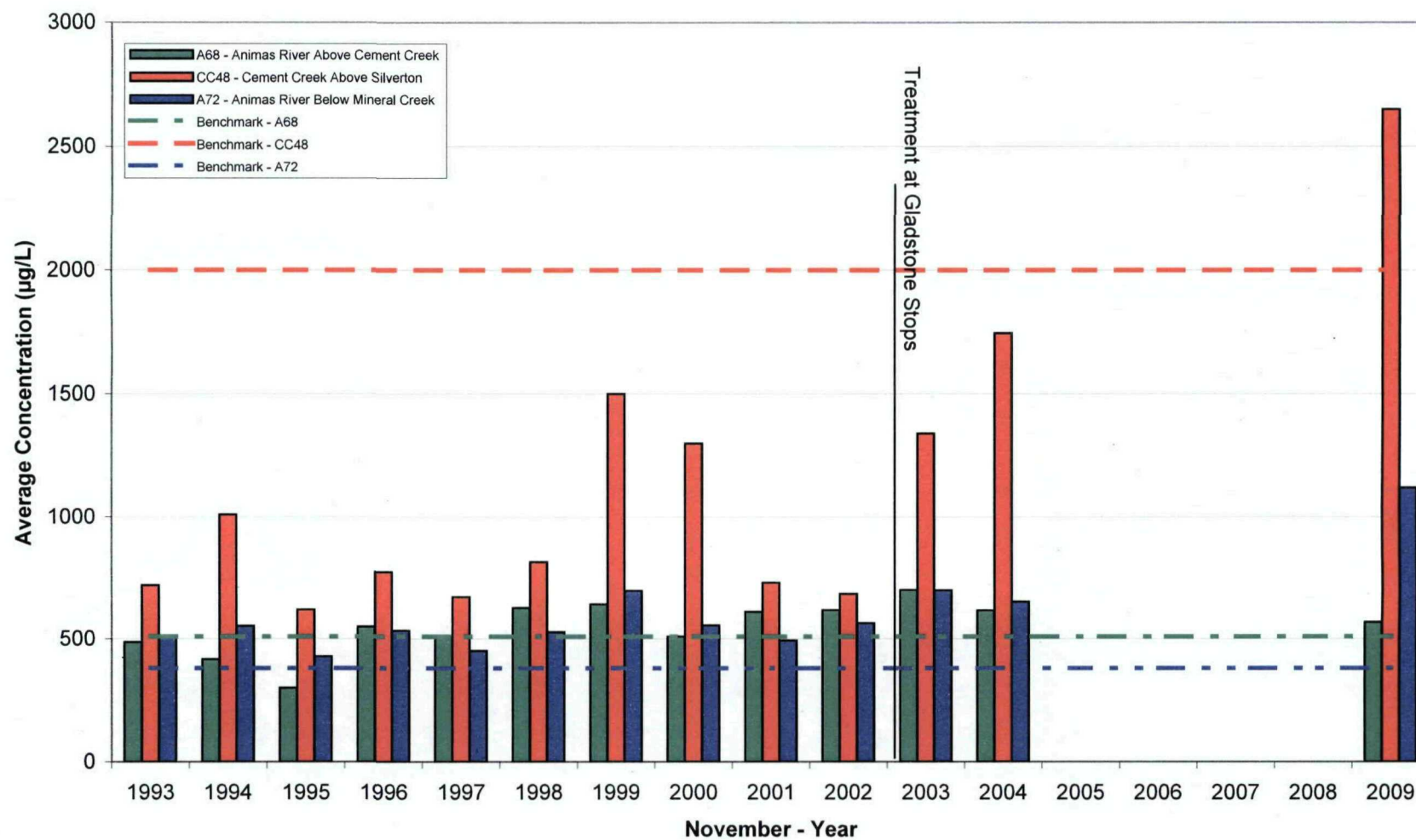
Sincerely,

William Simon

November Zinc Concentration Trends At Selected Stations



November Zinc Concentration Trends At Selected Stations



Gladstone Area Mine Event Timeline

DRAFT¹

November 23, 2010

1950's Tunnel extended beyond Gold King property to the Sunnyside Mine Workings and re-named the American Tunnel (AT).

1978 Lake Emma flood closes mine

Fall 1978 Treatment plant commissioned for the treatment of American Tunnel (AT) discharge. Re-designed and upgraded 1988-1989.

Nov., 1993 Tech Revisions to the Reclamation Plan that includes bulkheads approved by the MLRB.

May, 1994 Sunnyside Gold Corporation (SGC) filed for Declaratory Relief requesting that the Court determine whether seeps and springs that occurred after bulkheading would be subject to the NPDES requirements.

Summer, 1995 WQCC hearing on implementing new "goal based" water quality standards; resulted in ARSG accepting the challenge to determine conditions, determine feasibility for remediation, and make recommendations for achievable water quality standards throughout the Animas Watershed.

pre-1999? Mogul and Grand Mogul mines purchased at tax sale by Salem Minerals, Inc.. Later transferred to San Juan Corp (Todd Hennis, President of both)

Fall, 1995 ARSG formed and Bill Simon hired as Coordinator.

1995 Proposed SGC consent decree open for public comment; ARSG had not yet reached consensus therefore did not comment. Individuals, landowners, etc. were encouraged to comment on their own.

May, 1996 SGC and WQCD entered into the Consent Agreement. "A" list remediation projects: Sunnyside Mine Pool, So Fork Cement Cr Mine Waste dump, Surface Mill Tailings at Eureka, Gold Prince Mill tailings and bulkhead, Koehler Longfellow Portal and Mine Waste Dum, Boulder Creek Mill Tailings, Pride of the West Mill Tailings. "B" list projects: Columbus Mine Portal, London Portal

1996 SGC/St. of Colorado Consent Decree approved.

1996 SGC begins group A remediation projects including Koehler dump removal, Longfellow mine waste remediation, and the Koehler/Junction red sludge pond cleaning below these two sites. Lead Carbonate Tailings Pond was removed in 1995 as an "A List Project". Eureka Tailings removal was completed in 1996. A List projects completed in 1997 included Ransom Tunnel bulkhead, Boulder Creek Tailings removal, Pride Tailings removal, Gold Prince bulkhead, tailings and waste dump isolation. Alkaline injection into the mine pool was also a CD project as was the treatment of Cement Creek.

¹ Caution: the dates and related text are intended to be accurate but not guaranteed to be. I would appreciate any information useful to make corrections. In the meantime consider this a 3rd draft. Bill

1997 American Tunnel 1st bulkhead installed. (Valve closed on July 29, 2003, opened to meet Town of Silverton's need to stop a "call" on water in the Animas. Valve closed for good on September 9, 1996.

Aug., 1999 S. Fearn becomes principal of Gold King Mines Corporation.

1999 – 2001 Gold King discharge increases from 2.7 – 7 GPM to 31 to 72 GPM; metal load remains about the same however.

1999 – 2003 Mogul mine discharge increases significantly according to Todd Hennis; but ARSG has no data for the mine for this period. (ARSG data after 2003 indicates an increased flow since our 1997 sample)

? Sunnyside did supplemental CD projects, Mayflower Mill/TP#1 upland diversions, TP4 toe ditch liner and upland diversions.

May, 2001 Last sample taken before AT #1 bulkhead. Sunnyside Mine pool thought to have reached equilibrium. (This condition was required to be met before additional bulkheads could be installed downstream in the AT).

August, 2001. American Tunnel 2nd bulkhead installed; valve closed on August 31st,

December, 2002. American Tunnel 3rd bulkhead installed; valve closed on December 3rd.

____, 2002 Gold King Mines Corp. (GKC) purchased the Mogul mine from San Juan Corp. (SJC, Hennis owner). Received the Herbert Placer at Gladstone in addition to sales agreement from Gold King ???.

____, 2002. SGC and GKC enter into agreement(s) for GKC to take over the SGC treatment plant, treat Cement Creek for 6 months and the remaining discharge from the AT. (GKC wanted to use the treatment plant to treat Gold King flow as part of their mining plan. They also agreed to install bulkheads at the Mogul and Koehler mines. Mogul bulkhead was completed in August 2003 and Koehler bulkhead completed September 2003.

2003 Sunnyside completes a supplemental Power Plant Tailings Project and the construction of a reactive treatment wall below Mayflower Tailings Pond #4.

Jan, 2003 CDPHE determined that the Terms of Consent Decree had been met and

Jan, 2003 CDPHE transferred the AT CPDES (discharge) permit to GKC.

Related Agreements between SCG and other parties:

Baumgartner Agreement (SGC funds to facilitate bulkheading Koehler Tunnel),

San Juan Agreement (Herbert Placer deeded to San Juan, San Juan transfer Mogul to Gold King Mines, San Juan lease settling ponds to Gold King for water treatment)

Gold King Agreement (bulkhead Mogul, Am Tunnel WWTP and other buildings transferred to Gold King, **Transfer Am Tunnel discharge permit to Gold King** etc)

____, 2003 ?Agreement between SGC and SJC resulted in SJC holding a second mortgage on properties of GKC which included the patented claims upon which the treatment plant was located, plus the Gold King and Mogul mines. SGC also attained the Herbert Placer where the treatment settling ponds were located.

July, 2003 Consent decree terminated.

Jan., 2003 GKC begins treatment of AT, treated Cement Creek till June, 2003 and AT discharge until Jan., 2004

Summer, 2003 GKC installs pipe from GK to Gladstone and begins treatment of GK discharge.

Summer, 2003 GKC completes bulkhead installation in Mogul Mine.

Fall 2003 GKC completes bulkhead installation in Koehler tunnel.

Jan., 2004 Severe storm at Gladstone resulted in discharge at Gladstone (AT treatment) out of compliance. Treatment stops.

July, 2004 GKC lease with SJC was modified so GKC could install new equipment, new settling ponds, and restart treatment of AT. However treatment not restarted due to SJC renewing litigation between GKC and SJC

Sept., 2004 Simon first notices and reports on an increase of flow from Red and Bonita mine to 72 GPM.

Sept, 2004 SJC successfully brakes lease (court order) on claims where the Treatment plant and settling ponds were located.

Oct., 2004 Through action initiated by SJC, San Juan County District court ordered that GKC cease and desist the use of the treatment settling ponds through the loss of lease on the settling ponds.

Fall, 2004 ARSG requests EPA to provide a Targeted Brownfields grant to San Juan County to investigate increasing discharges from Gladstone area mines, determine practical treatment plant designs and discharge sources.

Dec., 2005 ? GKC loses part of the treatment facility and land area proposed for new settling ponds through additional action brought on by SJC. SJC also forecloses on Mogul mine and Gold King becoming owner?

2005 After waiting for results of GKC/SJC proceedings through 2004, Sunnyside reclaimed the settling ponds per reclamation plan and a court order to GKC requiring removal of sediments.

Winter, 2004-5. ARSG requests BLM to explore potential operational entities and funding mechanisms for a new Gladstone area treatment plant. BLM contracts with San Juan County to accomplish this.

Spring, 2005 San Juan County sponsors the Targeted Brownfields Initiative for Gladstone treatment possibilities. EPA begins data collection of key mine discharges and stream water quality.

March, 2006 At the request of ARSG, GKC applies for AT discharge permit renewal to keep the option open for a new operator to treat discharges in the Gladstone area. Permit renewal was denied.

May, 2006 San Juan County Attorney completes his BLM funded report on Gladstone treatment plant funding and operational potentials.

Sept., 2006 Targeted Brownfields Water Treatment Evaluation Report released.

Sept., 2006 Targeted Brownfields reports finalized. Reviewed and discussed by ARSG over several meetings. Potential funding sources explored. Sources for sludge disposal explored. High Density Sludge treatment plant determined to be effectual but problematic due to large sludge generation and disposal costs whether low or high density design. Todd Hennis suggests that a new rotary concentrator designed by Ionic Technologies, Inc might be added to increase efficiency.

Nov, 2007 Addendum to the Water Treatment Evaluation Report released.

____, 200 EPA and BLM assists Ionic Technologies in field testing of the rotary concentrator on Gold King and Cement Creek water.

____, 2007 Simon encourages that new and/or innovative water treatment technologies be explored. Several companies participate. (On-going)

____, 2007 Simon suggests that the ARSG explore developing a pilot demonstration plant designed to test various new and emerging treatment technologies that would serve the nation and eventually would result in a practical technology being chosen for permanent installation at Gladstone. (On going)

____, 2008 – 10 Peter Butler explores various permitting options that might be used to maximize flexibility and minimize of permit requirements, and the legal possibilities of combining the discharges and waste streams of the Gladstone area mines owned by BLM, Corporations, and private owners. ARSG continues support of Good Samaritan legislation likely necessary for a collaborative, multi-party, and multi-source treatment facility. (www.goodsamaritaninfo.org)

Nov., 2008 BLM reports on final test results of Ionic Water Rotating Cylinder demonstration run for Gladstone area waters.

Feb, 2009 Blue Sky Water Technology presents results of AT and GK bench treatment test results.